DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-019200
Date Inspected: 05-Jan-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name:	Shi Lei			**CWI Present:**	☑ Yes	☐ No		
Inspected CWI report:	☐ Yes	☐ No	☑ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A	
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No	☐ N/A	
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A	
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A	

Bridge No: 34-0006
Component: OBG Segments

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 12AW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a UT repair on a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated CA3007-005, Edge Plate to Side Plate hold back weld. The welder is identified as #040656 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-345-SMAW-1G (1F)-FCM-repair-1 for WR18910.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a UT repair on a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG3004AA-021, Edge Plate to Deck Plate hold back weld. The welder is identified as #046709 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for WR18909.

Segment 12BW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a UT repair on a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated CA3008-001, Edge Plate to Side Plate hold back weld. The welder is identified as #040656 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-345-SMAW-1G (1F)-FCM-repair-1 for WR18910.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a UT repair on a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated CA3009-002, Edge Plate to Deck Plate hold back weld. The welder is identified as #046709 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for WR18909.

Segment 12BE/12CE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated OBE12A-003, Deck Plate transverse splice root pass. The welder is identified as #040367 and was observed welding in the 1G (flat) position using Welding Procedure Specification WPS-B-T-223(2)1T-ESAB-1.

Segment 12AE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a UT repair on a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG3001AA-021, Edge Plate to Deck Plate hold back weld. The welder is identified as #040320 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for CWR2683.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a UT repair on a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG3001AA-022, Edge Plate to Side Plate hold back weld. The welder is identified as #050289 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for CWR2684.

Segment 12BE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a UT repair on a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated CA3002-002, Edge Plate to Deck Plate hold back weld. The welder is identified as #040320 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for CWR2683.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a UT repair on a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated CA3002-001, Edge Plate to Side Plate hold back weld. The welder is identified as #050289 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for CWR2684.

Segment 12AE/12BE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a UT repair on a Complete Joint

Penetration (CJP) weld joint. The Weld joint is designated OBE12D-002, Side Plate transverse splice. The welder is identified as #040320 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-345-SMAW-3G (3F)-FCM-repair-1 for CWR2681.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a UT repair on a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated OBE12-001, Edge Plate transverse splice. The welder is identified as #050289 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for CWR2680.

For the above mentioned welding activities ZPMC Quality Control (QC) Inspector is identified as Liu Hua Jie and Wang Li Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Segment 12AW/12BW

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Deck Plate transverse CJP splice.

Segment 12BE/12CE

This QA Inspector observed fit up of the Bottom Plate WT stiffeners.

This QA Inspector observed ABF personnel performing Magnetic Particle Testing on the Deck Plate transverse CJP splice FCAW root pass.

Segment 12CW

This QA Inspector observed beveling of the Deck Plate, Bottom Plate and Side Plates with the use of a mechanical guided torch.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

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Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez,Dan	Quality Assurance Inspector
Reviewed By:	Dsouza,Christopher	QA Reviewer